

CLAIMS

1. An ameliorant for improving the movement of the digestive tract, comprising as an active ingredient 4-amino-5-chloro-2-methoxy-N-[(2S,4S)-2-hydroxymethyl-4-pyrrolidinyl]benzamide or an acid addition salt thereof which has high binding affinity for a serotonin receptor 4 (5HT₄) and does not cause arteritis and thrombus formation.

2. A medicinal composition for improving the movement of the digestive tract, comprising as an active ingredient 4-amino-5-chloro-2-methoxy-N-[(2S,4S)-2-hydroxymethyl-4-pyrrolidinyl]benzamide or an acid addition salt thereof which has high binding affinity for a serotonin receptor 4 (5HT₄) and does not cause arteritis and thrombus formation, and a pharmaceutically acceptable carrier.

3. A treating method for promoting the movement of the digestive tract, which comprises using an ameliorant for improving the movement of the digestive tract comprising as an active ingredient 4-amino-5-chloro-2-methoxy-N-[(2S,4S)-2-hydroxymethyl-4-pyrrolidinyl]benzamide or an acid addition salt thereof which has high binding affinity for a serotonin receptor 4 (5HT₄) and does not cause arteritis and thrombus formation, or using a medicinal composition for improving the movement of the digestive tract comprising the ameliorant and a pharmaceutically acceptable carrier.

4. A method for improving the movement of the digestive

tract of a human or an animal while avoiding occurrence of arteritis, thrombus formation or encephalomalacia, which comprises administering 4-amino-5-chloro-2-methoxy-N-[(2S,4S)-2-hydroxymethyl-4-pyrrolidinyl]benzamide or an acid addition salt thereof or a medicinal composition containing the ameliorant and a pharmaceutically acceptable carrier to a human or a mammal.

5. 4-Amino-5-chloro-2-N-[(2S,4S)-2-hydroxymethyl-4-pyrrolidinyl]benzamide or an acid addition salt thereof.

6. 4-Amino-5-chloro-2-N-[(2S,4S)-2-hydroxymethyl-4-pyrrolidinyl]benzamide in which an amino group at position 4 or/and an amino group of the pyrrolidinyl group is optionally protected, or an acid addition salt thereof.

7. A process for preparing 4-amino-5-chloro-2-methoxy-N-[(2S,4S)-2-hydroxymethyl-4-pyrrolidinyl]benzamide or an acid addition salt thereof, which comprises reacting 4-amino-5-chloro-2-methoxybenzoic acid having an optionally protected amino group, or a reactive derivative thereof with (2S,4S)-4-amino-N-acyl-2-hydroxymethylpyrrolidine to obtain 4-amino-5-chloro-2-methoxy-N-[(2S,4S)-1-acyl-2-hydroxymethyl-4-pyrrolidinyl]benzamide or an acid addition salt thereof, and eliminating a protecting group and the acyl group, when a protecting group is used in the acyl group.

8. (2S,4S)-4-amino-N-acyl-2-hydroxymethylpyrrolidine having an optionally protected amino group.

9. The compound according to claim 8, wherein a protecting group for an amino group is an acyl group, and the said acyl group and an acyl group of N-acyl are selected from formyl, acetyl, propionyl and benzoyl.

10. The compound according to claim 8, wherein the acyl group is acetyl.